



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------------------------------------------------------------------|-------------|------------------------|-------------------------------|------------------------|
| 10/666,032 | 09/18/2003 | Eric Lawrence Barsness | ROC920030264US1 | 7940 |
| 46296 7590 08/03/2007 MARTIN & ASSOCIATES, LLC P.O. BOX 548 CARTHAGE, MO 64836-0548 | | | EXAMINER MITCHELL, JASON D | |
| | | | ART UNIT 2193 | PAPER NUMBER |
| | | | MAIL DATE 08/03/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/666,032

Applicant(s)

BARSNESS ET AL.

Examiner

Jason Mitchell

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8,9,17,18,28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8,9,17,18,28 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 8-9, 17-18 and 28-29 are pending in this application.

Response to Arguments

2. **Applicant's arguments on pp. 5-6 regarding claims 8, 17 and 28 have been fully considered but they are not persuasive.**

Applicant asserts 1) Heinen does not teach or suggest modifying a program variable because the cited DEPOSIT message is "a message requesting that data forming part of the message be deposited in the memory of the specified job or process" (Heinen col. 7, lines 30-32) and this memory "could contain a table of information that is modified that has nothing to do with program variables" (remarks pg. 5, 4th paragraph). And 2) the DEPOSIT command in Heinen is a user command and thus "expressly teaches away from the limitations in claim 8" (remarks pg. 5, 4th paragraph).

3. Examiner disagrees.

1) First it is unclear which table applicant is asserting could be modified, or how such a table would be distinct from a variable (or a table of variable values). Second, it is the examiner's position that those of ordinary skill in the art of debugging would reasonably interpret Heinen's disclosure at col. 7, lines 30-32 to at least include (arguably among other things) setting the value (i.e. "data ... be deposited") of a

Art Unit: 2193

process variable stored in memory (i.e. "deposited in the memory of the specified job or process"). Thus, the disclosure provides sufficient teaching and motivation to provide an action similar to Heinen's DEPOSIT command, in Haban's system (pg. 173, col. 2, par. 2 "the global event is satisfied and the action associated with the satisfaction is performed").

2) Although Heinen's DEPOSIT command is disclosed as a 'user command' this would not preclude one of ordinary skill in the art from recognizing it's usefulness as an automatically triggered action in Haban's system (pg. 173, col. 2, par. 2 "the action associated with the satisfaction is performed").

4. Applicant's arguments on pg. 6 regarding claims 9, 18 and 29 have been fully considered but they are not persuasive.

5. Applicant asserts "The examiner's mapping of Diec on the limitations in claim 9, 18 and 29 is in error because issuing a message to another software object ... does not read on outputting a debug message to the second job's output as recited in claims 9, 18 and 29. While issuing a message to another software object to trigger generation of tracing data may ... result in generating output from a job, the message is not in the output from the job." (see the last paragraph on pg. 6).

6. Examiner disagrees. The claim reads in part:

Art Unit: 2193

“the inter-job breakpoint mechanism ... outputs a debug message to the second job’s output.”

This language is broad in that it does not define what comprises a debug message or how the outputting is preformed. Accordingly, the examiner asserts that, given the broadest reasonable interpretation of the claim, Diec’s disclosure of “issuing a message to another software object to trigger generation of tracing data” (col. 2, lines 3-5) anticipates the claimed “output[ting] a debug message” (“tracing data”) “to the second job’s output” (col. 9, lines 11-16 “the default logfile associated to the object”). Further, as stated in the rejection, it would have been obvious to provide a message such as the one described in Diec as an action performable upon the satisfaction of a Haban event (pg. 173, col. 2, par. 2 “the global event is satisfied and the action associated with the satisfaction is performed”).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 8, 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Global Events and Global Breakpoints in Distributed Systems” by Haban and Weigel (Haban) in view of US Re. 26,852 to Heinen, Jr. (Heinen).**

8. **Regarding Claims 8, 17 and 28:** Haban discloses an apparatus comprising:

at least one processor (pg. 166, col. 1, par. 2 "processors");

a memory coupled to the at least one processor (pg. 166, col. 1, par. 2 "memory");

a first job residing in the memory and executed by the at least one processor (pg. 166, col. 1, par. 2 "multiple process running on multiple processors");

a second job residing in the memory and executed by the at least one processor (pg. 166, col. 1, par. 2 "multiple process running on multiple processors");

an inter-job breakpoint mechanism that detects at least one condition in the first job and, in responding thereto (pg. 173, col. 2, par. 2 "the global event is satisfied and the action associated with the satisfaction is performed"),

9. Haban does not explicitly disclose the response comprises modifying a program variable in a second job, but does disclose sending a debug message to another job (pg. 173, col. 2, par. 2 "The local debuggers ... exchange information among each other").

10. Heinen teaches a message that modifies a program variable in a second job (col. 7, line 30-32 "DEPOSIT – a message requesting that data forming part of the message be deposited in the memory of the specific job or process").

Art Unit: 2193

11. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Haban and Heinen to provide means for debugging distributed processes (Haban Title "Global Breakpoints in Distributed Systems"; Heinen Abstract "debugging ... jobs or processes running on one or more remote units").

12. **Claims 9, 18 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Global Events and Global Breakpoints in Distributed Systems" by Haban and Weigel (Haban) in view of US Re. 26,852 to Heinen, Jr. (Heinen) further in view of US 6,083,281 to Diec et al. (Diec).**

13. **Regarding Claims 9, 18 and 29:** The rejections of claims 8, 17, 28 are incorporated, respectively; further, Haban discloses a response comprising outputting a debug message to a second job (pg. 173, col. 2, par. 2 "The local debuggers ... exchange information among each other"). However, the Haban-Heinen combination does not explicitly disclose the response outputs a debug message to a second job's output.

14. Diec teaches a response comprising outputting a debug message to a second job's output (col. 2, lines 1-5 "issuing a message to another software object to trigger generation of tracing data")

Art Unit: 2193

15. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Haban-Heinen and Diec in order to provide means for debugging distributed processes (Haban Title "Global Breakpoints in Distributed Systems"; Heinen Abstract "debugging ... jobs or processes running on one or more remote units"; Diec col. 2, lines 10-12 "provide a distributed data network ... that has a tracing capability").

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-

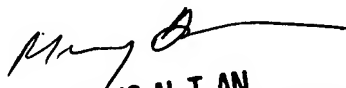
Art Unit: 2193

3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Mitchell/
Jason Mitchell
7/24/05


MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100